Amendment to Specification:

Please replace paragraphs [0009], [0018] and [0021] as follows:

"**[0009]** A method and system is disclosed for concentrating high energy particles on a predetermined area on a target semiconductor substrate. A high energy source for generating a predetermined amount of high energy particles, and an electro-magnetic radiation source for generating low energy beams/waves/particles (such as laser, ~~ultra-violate~~ultraviolet, infrared, or microwave) are used together. The system also uses a mask set having at least one mask with at least one alignment area and at least one mask target area thereon, the mask target area passing more high energy particles then any other area of the mask. At least one protection shield is incorporated in the system for protecting the alignment area from being exposed to the high energy particles, wherein the mask is optically aligned with the predetermined target semiconductor substrate using the low energy beams, wherein the high energy particles generated by the high energy source pass through the mask target area to land on the predetermined area on the target semiconductor substrate.

[0018] The present disclosure provides a CPB system incorporating an energy source such as a low energy electro-magnetic radiation (LEEMR) source and detector system for the purpose of maintaining mask-reticle-to-substrate-wafer alignment during the usage of high energy charged particle beams within microlithography systems. Several examples of LEEMR implementations as well as several examples of mask reticle designs suitable for use with high energy CPB microlithography systems are described in accordance with the present disclosure. The LEEMR source may be a laser, ~~ultra-violate~~ultraviolet, infrared, or microwave source. The disclosed CPB method and system results in a longer life span for the system components and mask reticles. The process integrity, control and

yields of the microlithography operation will be higher. Also, overall system safety, maintainability and complexity will be simpler with reduced operational costs.

[0021] Protection shields 306 and 308 are placed adjacent to the mask reticle's alignment markers 302, positioned to receive and confine therebetween the oncoming particle beam from above. Protection shield 306 is located towards the center portion of the mask reticle, defining an area surrounding the mask target area 304. Protection shield 308 is located adjacent to the outer edge of the mask reticle so as to keep the alignment markers 302 between the protection shields 306 and 308. There are LEEMR sources/detectors 310 (shown in Fig. 3a but not shown in Fig. 3b) located at one end of the extended protection shields, also positioned between the inner and outer protection shields (306 and 308 respectively). For example, the LEEMR source/detector 310 is located directly above each of the mask reticle's alignment markers 302 along an axis parallel to the CPB axis. The LEEMR sources/detectors 310, positioned within the cavity area formed by the inner and outer protection shields 306 and 308, are thus protected from direct exposure to the CPB. The LEEMR sources may produce low energy beams such as laser beam, ~~ultra-violate~~ultraviolet beams, infrared beams, microwave, etc. For the purpose of this disclosure, the term "low energy beam" shall represent and include low energy particles, waves or other similar forms of low energy radiations. The energy level may vary, but, at the very least, the LEEMR is not allowed to have a damaging impact on the mask reticle."